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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,082	02/02/2004	Tsutomu Tsukagoshi	Y2238.0056	6555

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EXAMINER
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BARON, HENRY

ART UNIT	PAPER NUMBER
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2616

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02/20/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/768,082

Applicant(s)

TSUKAGOSHI ET AL.

Examiner

Henry Baron

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/ are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/22/2007</u> . | 6) <input type="checkbox"/> Other: _____  |

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### ***Detailed Action***

#### ***Response to Arguments/Remarks***

1. Claims 1-24 are pending in the application with no claims amended. Claims 6-7, 14-15, and 22-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form.
2. Applicant's arguments filed 11/21/2007 have been fully considered but they are not persuasive.
3. Upon further consideration of the prior art, the objection to claims 6 – 7, 14 –15, and 22 – 23 are withdrawn.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - a. A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
5. Claims 1, 9 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art of Applicant in view of La Porta et al (U.S. Patent 5,434,852) hereafter La Porta.
6. Considering Claims 1, 9, and 17, Applicant teaches as admitted prior art of a method, network device and packet communication system performing packet communication in which in which incoming and outgoing calls are controlled at call control means and user data is encapsulated and decapsulated at user data processing means, comprising resource management means for managing resources of the user data processing means. (1: [0004 .0006] read A conventional packet communication system basically comprises, shown in FIG. 7, a mobile unit 3, .. an SGSN, .... The SGSN 9 serves as a core network node in the packet communication system, in which a C-plane (call control section) comprises a plurality of call processors 92 and 93, .. a resource management processor.).

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7. But Applicant's admitted prior art does not teach of the resource management means being provided in the user data processing means.

8. LaPorta teaches of an architecture where the resource management means being provided in the user data processing means. (Abstract read .. [i]n the architecture, various traditional call processing functions, such as switching fabric or channel control, call control, and connection control i.e. resource management means are separated into distinct application processes (sic resource management means) with clearly defined interfaces for communications between these application processes. Those distinct application processes may be implemented in separate physical or logically partitioned nodes i.e. user data processing means also (2: [0009] read .. [t]he present invention is directed to a distributed, server-based communications network architecture in which various traditional call processing functions, such as switching fabric or channel control, call control, connection control i.e. resource management means, are separated into distinct application processes with clearly defined interfaces for communications between these application processes)

9. It would have been obvious at the time the invention was made by a person of to having ordinary skill in the art to modify the method, network device and packet communication system performing packet communication teachings of the admitted prior art to incorporate resource management means to be provided in the user data processing means as taught by LaPorta.

10. The modification of the prior art in this manner which distributes the resource management means into call user data processing allows the resource management means to operate autonomously and removes delays and mitigates a single point of failure of communication and processing contention of multiple user data processor means for a single resource management means as in the previous prior art architecture.

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11. Claims 2 – 8, 10 – 16, and 18 – 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of La Porta et al (U.S. Patent 5,434,852) hereafter La Porta and in further view of Xu et al (U.S. Patent 6,909,609).

12. Considering Claims 2, 10, and 18, though Applicant's admitted prior art modified by La Porta teaches of a method and network device with resource management means that manages QoS computation for connections (7: [0023-0025]), however the references do not explicitly teach of managing an available resource ratio indicating a ratio of remaining bands and the number of remaining sessions relative to band resources and the number-of-sessions resources of the user data processing means.

13. Xu teaches of a call admission control in a telecommunication network where a bandwidth ratio that indicates a ratio of remaining bands and the number of remaining sessions relative to band resources and the number-of-sessions resources of the user data processing means. (7: [0010-0020] read B, total effective bandwidth required for an incoming call and B' calls (i.e. sessions) relative to the provisioned bandwidth).

14. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to modify the data processing means of La Porta with the bandwidth ratio teachings of Xu.

15. This modification allows the resource management means to record available bandwidth for each data processing means when it allocates or de-allocates capacity and thus establishes the data processing capacity of each user data processing means.

16. In regards to Claims 3, 11, and 19, La Porta teaches that call control means comprises storage means for storing the available resource ratio of the user data processing means that is notified from the resource management means (6:[0054-0057] read user and service database).

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17. In consideration of claim 4, 12, and 20, Applicant admitted prior art teaches the user data processing means attaching the available resource ratio to a response signal from the call control means and then sends the resulting response signal to the call control means, (1: [0015] read .. conventional resource management technique also encounters a problem because the resource management processor responsible for centralized control of processing bands and the number of processing sessions for all the user data processing units must work on matching and linking of information between the call control section and user data processing units ...)

18. In consideration to claims 5, 13, and 21 Applicant admitted prior in modification with La Porta teaches the limitations of Claims 4, 12, and 20, but are silent regarding to setting up a session call setup request sent from the call control means in order to establish a session based on the available resource ratio received from the data processing means.

19. However, Xu teaches of setting up a session call setup request sent from the call control means in order to establish a session based on the available resource ratio received from the data processing means. (5: [0009-0015] read [t]he call admission decision for an incoming call is based on the provisioned bandwidth for a given communication path, e.g. 309, and the effective bandwidth required to accommodate the incoming call and the number of currently active calls over that communication path.).

20. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to modify the data processing means of Applicant's admitted prior art modified by La Porta with the session setup teachings of Xu.

21. This modification would be advantageous since the call control means would then be able to determine based on the available resource ratio whether or not to set up a call with the user data processing means.

22. With regards to claims 6 – 7, 14 – 15, and 22 – 23, Applicant's admitted prior art teaches of a packet communication system according wherein the resource management means (user data processing

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means) attaches the available resource ratio to a response message for a call release request or health check signal message sent from the call control means in order to release the session, and then sends the resulting response message to the call control means. (1: [0015] read .. the resource management processor responsible for centralized control of processing bands and the number of processing sessions for all the user data processing units must work on matching and linking of information e.g. call release request and health check signal message, between the call control section and user data processing units ...) but does not teach of the user data processing means attaching such information

23. LaPorta teaches of an architecture where the resource management means being provided in the user data processing means. (Abstract read .. [i]n the architecture, various traditional call processing functions, such as switching fabric or channel control, call control, and connection control i.e. resource management means are separated into distinct application processes (sic resource management means) with clearly defined interfaces for communications between these application processes. Those distinct application processes may be implemented in separate physical or logically partitioned nodes i.e. user data processing means also (2: [0009] read .. [t]he present invention is directed to a distributed, server-based communications network architecture in which various traditional call processing functions, such as switching fabric or channel control, call control, connection control i.e. resource management means, are separated into distinct application processes with clearly defined interfaces for communications between these application processes)

24. It would have been obvious at the time the invention was made by a person of to having ordinary skill in the art to modify the method, network device and packet communication system performing packet communication teachings of the admitted prior art to incorporate resource management means to be provided in the user data processing means to attach such information as taught by LaPorta.

25. The modification of the prior art in this manner which distributes the resource management means into call user data processing allows the resource management means to operate autonomously and

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removes delays and mitigates a single point of failure of communication and processing contention of multiple user data processor means for a single resource management means as in the previous prior art architecture.

26. In consideration of claims 8, 16, and 24, Applicant's admitted prior art in medication with La Porta teaches the limitations of Claims 2, 10, and 18, but are silent regarding to the teaching of call control means selecting the user data processing means having remaining resources in accordance with the available resource ratio and sends the call setup request for establishment of the session to the selected user data processing means.

27. Xu teaches of call control means selecting the user data processing means having remaining resources in accordance with the available resource ratio and sends the call setup request for establishment of the session to the selected user data processing means. (3:[0046-0067]).

28. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to modify the data processing means of La Porta with the remaining resource teachings of Xu.

29. This modification would be advantageous since the call control means would then be able to determine based on the remaining available resource whether or not to set up a call with the user data processing means.

### *Conclusion*

30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry Baron whose telephone number is (571) 270-1748. The examiner can normally be reached on 7:30 AM to 5:00 PM E.S.T. Monday to Friday.

31. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

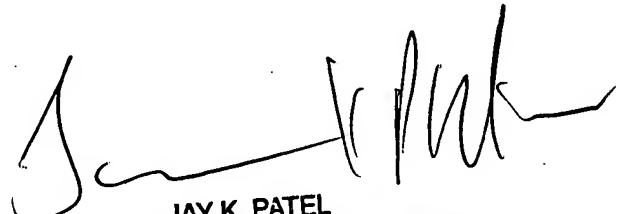


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32. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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